## ABSTRACT OF THE DISCLOSURE

Plural subcarrier-multiplexed AM signals 30 are input and narrow-band-FM-modulated by a voltage controlled oscillator 4 including the fundamental carrier wave and higher-order harmonics as the output, and the FM carrier wave component of the higher-order harmonics of the fundamental carrier wave is selectively taken out by a band-rejection filter 5, shifted to the lower frequency side by a frequency converter 7, converted into an optical signal by an electric/optic converter 3 and transmitted.